TABLE 2.—*Pluviometric coefficients for the "rainfall centers" of the different States*—Concluded.

States.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	Total annual precipitation.	Range of intensity.
						H. MINIMUM IN *October;* MAXIMUM IN *February–March.*							*Inches.*	*Pl. Coef.*
Kentucky	75	*69*	103	95	102	114	**128**	101	104	114	112	93	46	69
Tennessee	76	*67*	94	102	113	122	**135**	113	91	106	101	90	50	78
Northern Georgia	78	*62*	70	102	104	**149**	132	92	74	100	116	121	52	87
Northern Alabama	65	*55*	74	104	115	**142**	140	105	89	100	112	99	51	87
Northern Mississippi	72	*50*	81	109	122	131	**136**	106	88	104	109	92	52	86
Southern Arkansas	80	*66*	104	95	116	106	**129**	116	118	105	97	68	46	61
Section H	74	*58*	88	101	112	127	**133**	106	94	105	108	94	50	65
						K. MINIMUM IN *November;* MAXIMUM IN *July–August.*								
Pennsylvania	96	85	*83*	90	90	95	101	92	110	117	**128**	113	43	45
New Jersey	100	93	*89*	96	94	106	98	90	97	99	118	**120**	48	31
Maryland, Delaware, etc	97	86	*77*	93	86	105	100	93	104	120	**122**	117	41	36
Section K	98	88	*85*	93	90	102	100	92	104	112	**122**	116	44	39
						L. MINIMUM IN *November;* MAXIMUM IN *August.*								
West Virginia[5]	80	*72*	75	86	102	99	111	106	109	**135**	123	102	43	63
Virginia	96	91	*67*	89	81	102	95	94	107	122	125	**131**	44	64
North Carolina	91	78	*64*	88	82	114	100	84	97	119	138	**145**	50	81
South Carolina (inland)	94	71	*66*	84	89	136	100	84	85	124	124	**143**	48	77
South Carolina (coast)	116	79	*63*	69	77	95	86	68	88	132	153	**175**	50	112
Southern Georgia	95	71	*61*	81	82	140	108	77	73	121	140	**151**	52	90
Section L	97	77	*66*	83	85	114	100	86	91	126	134	**141**	48	75
						M. INDETERMINATE SECTION WITH TROPICAL FEATURES.								
Eastern Florida	**171**	110	*49*	50	61	72	57	52	80	142	127	129	53	121
Western Florida	157	67	*42*	56	65	79	64	49	75	180	**185**	181	54	143
Southern Texas	**201**	101	82	65	*59*	72	68	77	132	124	91	128	25	142
						N. MINIMUM IN *October;* GULF COAST SECTION.								
Southern Alabama	83	*58*	72	93	93	**140**	134	78	80	102	134	133	53	82
Southern Mississippi	93	*55*	68	91	100	**131**	122	97	75	108	**131**	129	57	76
Louisiana	112	*63*	72	89	80	110	79	92	76	135	**161**	131	56	98
						P. MISCELLANEOUS AREAS.								
Northeastern Colorado[6]	84	81	37	35	*28*	47	88	176	**209**	138	158	119	16	181
Southeastern Colorado[6]	81	75	40	46	*30*	47	73	156	174	131	**188**	149	16	158
Northeastern New Mexico[1]	138	70	49	46	*37*	45	36	79	131	153	232	195	16	205
Arizona, etc.[1]	168	100	75	60	*51*	66	*51*	62	66	100	194	**200**	12	149
Northwestern Utah	78	90	94	119	128	131	135	118	**148**	62	*40*	57	13	108
Colorado area (west)	97	76	93	136	121	153	100	40	*20*	*20*	152	**192**	13	172
Colorado area (east)	128	70	66	79	79	108	77	32	*22*	37	236	**266**	6	244
Maine	99	98	105	100	105	**121**	116	81	98	91	99	*87*	42	84

[1] Relatively few observations. [5] Similar in many respects to section G. [6] Resembles section A, with special drop in June.

METEOROLOGICAL OBSERVATIONS NEAR SCHIEFFLIN, LIBERIA, 1913–1914.

P. C. DAY, Climatologist and Chief of Division.

[Dated: Weather Bureau, Washington, D. C., Apr. 27, 1915.]

The Christian Woman's Board of Missions, at Indianapolis, Ind., a few years ago established a branch mission at Schiefflin, Liberia, at which point a series of meteorological observations have been made for nearly two years past.

From May, 1913, to October, 1914, inclusive, the observations were made by Mr. Emory Ross, and since that time by Mr. Lewis A. Hurt, both associated with the mission work in that region.

Schiefflin, the point at which the observations are made, is located on the west coast of Africa, about 20 miles down the coast from Monrovia, the capital of the Republic of Liberia, and within a few hundred yards of the Atlantic Ocean, the exact location being in latitude 6° 11′ north, and longitude 10° 33′ west.

Instruments.—The instrumental outfit consists of a set of maximum and minimum thermometers and a rain gage. The thermometers are after the Weather Bureau pattern, made by the Taylor Instrument Co., of Rochester, N. Y., and compared with their standard. They are exposed in a large perforated box, protected from the weather by a good roof, and are at an elevation of about 5 feet from the ground. The rain gage is of the Glaisher pattern, manufactured by Short and Mason of London, England, and consists of a container 8 inches in diameter with a funnel cover of the same dimensions furnished with a curved tube to prevent evaporation. The graduated measuring jar reads to hundredths of an inch and holds ½ inch of rainfall. The gage is supported in a box fastened to a short post and the mouth of funnel is about 3 feet above the ground.

The instruments are located in a considerable cleared space about 25 feet above sea level, and opening toward the ocean. The adjacent country is both wooded and open.

The summary presented herewith embraces the principal numerical values of temperature, precipitation, and weather for each month, and should form a valuable basis for the study of the climate of that little known region.

Climate.—The following are a few of the more important features brought out by an inspection of the original records.

The climate of this place, only a few degrees from the Equator, is essentially equatorial, but doubtless greatly

modified by its proximity to the ocean and the prevalence of the alternating land and sea breezes. Although north of the Equator the highest day temperatures occur in the period December to May and the lowest during July to September. Night temperatures are fairly uniform throughout the year except for January and February when they are considerably lower than during the remaining months, probably on account of increased radiation due to absence of clouds and the drier condition of the atmosphere.

January has the greatest range between the day and night temperatures while the least occurs during the period June to September. The maximum temperature did not go higher than 91° during the entire period of 20 months observations and reached that point but 8 times.

Minimum temperatures range within a few degrees of 70° throughout the year, except from December to February, when they occasionally fall below 60°. A minimum temperature of 66° on the night of December 8, 1913, is referred to by the observer as a very cold night although in the following January readings as low as 58° were recorded.

The unusually low temperatures during these months are reported as occurring with dry north winds probably blowing from the Sahara, although their dry character is doubtless much modified during their passage over the intervening forests.

The characteristic wet and dry seasons of the Tropics are well defined in this section of the African coast. January probably has the least rainfall, only 0.10 inch falling during that month in 1914. December, February, and March likewise appear as months of light rainfall, the total for the four dry months constituting less than 3 per cent of the annual.

The wet season prevails from May to November, during which period rains are frequent and often heavy, as much as 6 to 8 inches falling in a single period of 24 hours. Considerable variation exists in the amounts during the same months of different years; for instance, June, 1913, had a total of 27.48 inches, while the same month of 1914 had slightly more than 50 inches. The total rainfall for the 12 months, July, 1913, to June, 1914, was more than 200 inches, a record probably equal to that of any other point along the coast.

During the rainy season precipitation is of almost daily occurrence, and cloudy weather prevails continuously for long periods. From July to October, 1913, inclusive, 123 days, rain occurred on all but 17 days.

During the drier period of the year there is much clear and pleasant weather, and the land and sea breezes occur at regular periods, the land breeze from about 11 p. m. to about 9 a. m. and the sea breeze for the remainder of the 24 hours.

TABLE 1.—*Summary of meteorological observations at Schiefflin, Liberia, May, 1913, to December, 1914.*

Months.	Temperature.							Precipitation.			Weather.		
	Mean maximum + mean minimum + 2.	Mean maximum.	Mean minimum.	Highest.	Lowest.	Greatest daily range.	Mean daily range.	Total.	Greatest in 24 hours.	Number of days with 0.01 inch or more.	Clear.	Partly cloudy.	Cloudy.
1913.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	Inches.	Inches.	Days.	Days.	Days.	Days.
May	80.0	87.7	72.3	91	68	21	15.4	9.93	2.58	17	8	14	9
June	78.7	85.3	72.1	90	69	18	13.2	27.48	4.38	24	1	4	25
July	77.7	83.4	72.0	88	68	16	11.4	30.69	6.24	29	0	0	31
August	77.0	81.7	72.3	86	71	14	9.4	30.07	6.16	25	3	11	17
September	76.6	81.7	71.6	85	68	14	10.1	23.90	3.06	26	5	9	16
October	78.6	84.7	72.6	89	70	17	12.1	24.35	4.52	26	12	14	5
November	79.6	86.6	72.5	89	70	18	14.1	8.74	2.35	15	7	17	6
December	79.9	87.8	72.0	91	66	22	15.8	1.74	0.74	4	13	11	7
1914.													
January	77.8	87.5	68.2	91	58	31	18.7	0.10	0.10	1	16	10	5
February	78.9	87.6	70.2	91	65	24	17.8	1.84	1.84	1	15	8	5
March	80.1	88.2	72.0	91	68	21	16.2	1.29	0.48	6	18	8	5
April	79.8	87.9	71.6	91	70	19	16.3	8.76	2.43	14	25	5	0
May	79.4	87.3	71.6	90	69	20	15.6	19.70	3.85	23	8	22	1
June	78.0	82.6	73.3	87	70	15	9.3	50.35	7.50	29	5	13	12
July	75.3	79.3	71.3	84	69	12	8.0	13.25	3.20	23	3	6	22
August	75.8	80.3	71.3	85	68	17	8.9	14.46	2.95	20	6	9	16
September	76.8	81.6	72.1	84	69	13	9.5	26.43	3.04	28	6	14	10
October	78.1	83.6	72.6	87	69	14	11.0	31.66	4.02	30	7	14	10
November	78.7	85.0	72.4	88	69	17	12.6	13.90	2.50	23	12	14	4
December	79.8	88.2	71.5	90	61	28	16.7	4.43	2.77	8	14	15	2

MONTHLY WEATHER PERIODICITY.[1]

By VLADIMIR KÖPPEN.

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It is wonderful with what stubbornness does persist the belief that the moon must in some kind of a manner exercise a decisive influence on the weather and that the wicked, narrow-minded scholars simply refuse to recognize it. It is claimed that scholars refuse to investigate the matter, contenting themselves with discrediting the statements made by the "Unbiased" who do not belong to the profession.

Now, there could be no more welcome present to meteorologists, particularly to those who are charged with the duties of a forecaster, than such a simple key to the confusion that surrounds the weather's changes. How much pleasanter the task of weather forecasting if, by a glance at the moon's position as given in an astronomical ephemeris, one could ascertain the actual tendency of the weather to improve, to grow worse, perhaps even the tendency to a given pressure distribution, instead of having painfully to acquire a knowledge concerning the behavior of lows, etc., that still leaves so many possibilities open.

For this very reason there actually are no small number of scientific studies of a possible lunar influence on the weather. To be sure, the instigators of the repeatedly reappearing lunar systems of weather prophecy are usu-

[1] Preliminary communication; the full memoir will appear in the Archiv der Deutschen Seewarte.—*Author.*